



**PATENT**

Case Docket No. ASMEX.448A

Date: April 8, 2004

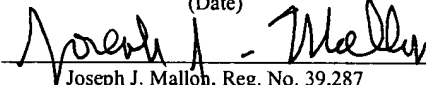
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s) : Brabant et al.  
Appl. No. : 10/800,390  
Filed : March 12, 2004  
For : EPITAXIAL  
SEMICONDUCTOR  
DEPOSITION METHODS AND  
STRUCTURES  
Examiner : Unknown  
Group Art Unit : Unknown

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

April 8, 2004

(Date)

  
Joseph J. Mallon, Reg. No. 39,287

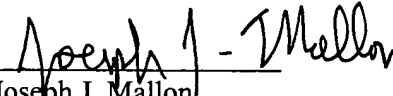
**TRANSMITTAL LETTER**

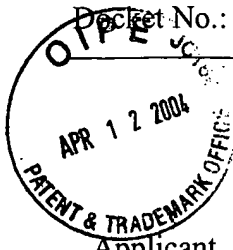
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with twelve (12) references listed but only eleven (11) references enclosed.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

  
Joseph J. Mallon  
Registration No. 39,287  
Attorney of Record  
Customer No. 20,995  
(619) 235-8550

**INFORMATION DISCLOSURE STATEMENT**

Applicant	:	Brabant et al.
App. No.	:	10/800,390
Filed	:	March 12, 2004
For	:	EPITAXIAL SEMICONDUCTOR DEPOSITION METHODS AND STRUCTURES
Examiner	:	Unknown
Group Art Unit	:	Unknown

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing twelve (12) references. Copies of disclosed U.S. patents and/or publications are not included pursuant to PTO waiver of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for applications filed after June 30, 2003. Copies of other references, if listed, are enclosed.

This Information Disclosure Statement is being filed with an RCE or within three months of the filing date of this application and no fee is required in accordance with 37 C.F.R. § 1.97(b)(1), (b)(2), or (b)(4).

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 4/8/04

By: Joseph J. Mallon  
Joseph J. Mallon  
Registration No. 39,287  
Attorney of Record  
Customer No. 20,995  
(619) 235-8550

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
ASMEX.448AAPPLICATION NO.  
10/800,390INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT  
Brabant et al.FILING DATE  
March 12, 2004GROUP  
Unknown

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1	US 2003/0235931 A1	12/25/03	Wada et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	2	Cannon, D. et al., "Tensile strained epitaxial Ge films on Si(100) substrates with potential application in L-band telecommunications," Applied Physics Letters, Volume 84, Number 6, February 9, 2004, pp. 906-908.
	3	Colace, L. et al., "Efficient high-speed near-infrared Ge photodetectors integrated on Si substrates," Applied Physics Letters, Volume 76, Number 10, March 6, 2000, pp. 1231-1233.
	4	Colace, L. et al., "Ge-on-Si Approaches to the Detection of Near-Infrared Light," IEEE Journal of Quantum Electronics, Vol. 35, No. 12, December 1999, pp. 1843-1852.
	5	Fama, S. et al., "High performance germanium-on-silicon detectors for optical communications," Applied Physics Letters, Volume 81, Number 4, July 22, 2002, pp. 586-588..
	6	Hull, R., "Metastable strained layer configurations in the SiGe/Si system," (1999) <u>EMIS Datareviews, Series No. 24: Properties of SiGe and SiGe:C</u> , edited by Erich Kasper et al., INSPEC (2000), London, UK
	7	Ishikawa, Y. et al., "Strain-induced band gap shrinkage in Ge grown on Si substrate," Applied Physics Letters, Volume 82, Number 12, March 31, 2003, pp. 2044-2046.
	8	Lee et al., "Growth of strained Si and strained Ge heterostructures on relaxed Si <sub>1-x</sub> G <sub>x</sub> by ultrahigh vacuum chemical vapor deposition," J. Vac. Sci. Technol. B 22(1) (Jan/Feb 2004).
	9	Li, Q, et al., "Selective growth of Ge on Si(100) through vias of SiO <sub>2</sub> nanotemplate using solid source molecular beam epitaxy," Applied Physics Letters, Volume 83, Number 24, December 15, 2003, pp. 5032-5034.
	10	Liu, J. et al., "Silicidation -induced band gap shrinkage in Ge epitaxial films on Si," Applied Physics Letters, Volume 84, Number 5, February 2, 2004, pp. 660-662.

EXAMINER	DATE CONSIDERED
<p>*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.</p>	

FORM PTO-1449      U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT          BY APPLICANT</b>  (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. ASMEX.448A	APPLICATION NO. 10/800,390
	APPLICANT Brabant et al.	
	FILING DATE March 12, 2004	GROUP Unknown

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	11	Masini, G. et al.; "High-Performance p-i-n Ge on Si Photodetectors for the Near Infrared: From Model to Demonstration," IEEE Transactions of Electron Devices, Vol. 48, No. 6, June 2001, pp. 1092-1096.
	12	Schollhorn et al., "Coalescence of germanium islands on silicon," Thin Solid Films," Vol. 336 (1988), pp. 109-111.

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EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	